



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



Freudenburg NOK-General
Partnership
Attn: Greg Keenan
P.O. Box B, Route 104
Bristol, NH 03222-0501

Re: Upper IPC Dam, Bristol
Dam #031.03

ADMINISTRATIVE ORDER
No. WD 04-001

January 23, 2004

A. INTRODUCTION

This Administrative Order is issued by the Department of Environmental Services, Water Division to Freudenburg NOK-General Partnership pursuant to RSA 482:12 and RSA 482:87. This Administrative Order is effective upon issuance.

B. PARTIES

1. The Department of Environmental Services, Water Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire, having its principal office at 29 Hazen Drive, Concord, NH 03301.
2. Freudenburg NOK-General Partnership is a business registered in New Hampshire having a mailing address of P.O. Box B, Route 104, Bristol, NH 03222-0501.

C. STATEMENTS OF FACTS AND LAW

1. Pursuant to RSA 482, DES regulates the construction and maintenance of dams so as to meet the stated statutory objectives, including the regulation of water levels, the lessening of flood damage, and the enhancement of public safety. Pursuant to RSA 482:87 the Commissioner of DES has adopted NH Admin. Rules Env-Wr 100-700 to implement this program.
2. RSA 482:11-a requires the owner of a dam to maintain and repair the dam so that it does not become a "dam in disrepair".
3. Freudenburg NOK-General Partnership owns Upper IPC Dam, located in Bristol, NH, further identified in DES records as Dam #031.03 ("the Dam"). Freudenburg NOK-General Partnership (the "Owner") has acknowledged ownership of the Dam in correspondence to the Water Division dated August 23, 2001.
4. RSA 482:12 requires DES to periodically inspect all dams in the state which may pose a menace to public safety, and to take action to ensure that the dam is repaired or reconstructed if the inspection indicates that the public safety so requires.
5. RSA 482:2, V defines a "dam in disrepair" as a dam which is a menace to public safety and is incapable of safely impounding flood waters to its crest, or is incapable of maintaining a

reasonably constant level of waters impounded or which does not contain adequate gates and sluiceways to provide for the holding or controlled discharge of waters impounded.

6. Env-Wr 101.21 defines “menace to public safety” as any dam the failure of which would threaten life or property. Property, when used in this context, means buildings, structures or other real estate.

7. Env-Wr 101.05 defines “Class B Structure” as a dam with a significant hazard potential, the failure of which would result in possible loss of life and significant economic loss.

8. Env-Wr 101.29 defines “possible loss of life” as the risk posed by water levels rising to the foundation but below the first floor elevation of a habitable structure during a dam breach.

9. In accordance with Env-Wr 301.03, DES has classified the Dam as a Class B, significant hazard potential structure.

10. On February 8, 2001, DES issued a Letter of Deficiency (“LOD”) to the owner requesting several maintenance items be addressed (Items 1-4 by April 1, 2001; Items 5-8 by August 1, 2001).

11. On April 2, 2001, DES received a letter from the Owner requesting a time extension. The letter indicated that the owner was considering decommissioning of the dam as the repair costs may exceed the maintenance costs.

12. On April 2, 2001, DES issued a letter to the Owner granting the requested time extension deadline of July 1, 2001, for Items 1-4 .

13. On July 19, 2001, DES received a letter from the Owner with an attached Operations and Maintenance Plan as requested by DES in the LOD.

14. On August 19, 2001, DES requested the Owner revise and re-submit the Operations and Maintenance Plan and an update of the status of the remainder of the items noted in the LOD

15. On August 28, 2001, DES received the revised Operations and Maintenance Plan and status of the LOD items from the Owner. The status report claimed substantial compliance with all items listed in the LOD.

16. On September 4, 2001, DES issued a letter to the Owner acknowledging the receipt and approval of the submitted Operations and Maintenance Plan, and indicating a follow-up inspection would be performed to determine the extent of compliance with the LOD.

17. On March 27, 2003, DES personnel visited the site and observed that the timber spillway apron had moved and its integrity was in question. Prior to the DES’s inspectors arrival at approximately 1:00 p.m., the Owner had removed stoplogs from the main dam and the right auxiliary spillway. Based on the visual inspection by DES personnel, it appeared that ice pressure and/or previous high flow conditions had lifted the timber apron and moved it between 8 and 11 inches downstream, leaving a gap between the downstream face of the overflow spillway and the timber apron.

18. Also on March 27, 2003, while the impoundment was dewatered, DES personnel observed several large voids beneath the upstream concrete slab and downstream timber face, as well as the presence of significant deterioration on internal timbers and the lack of structural support for the stoplogs and walkway. In addition, there was a significant bulge in the downstream direction of the stoplog section/walkway that appeared to have worsened considerably in the last several years.

19. On March 28, 2003, the Owner carried out a temporary repair to the timber spillway apron (through the spring runoff season) by bridging the gap with 2" x 12" planks in an effort to keep spillway flows from entering and forcing the apron further downstream.

20. April 1, 2003, DES issued a letter to the Owner expressing concerns that resulted from the March 27, 2003 inspection described above and requested the Owner schedule a meeting with DES personnel to discuss future repairs.

21. The Owner did not contact DES as requested to schedule a meeting

22. During the weekend of March 29, 2003, spring runoff conditions coupled with a rain event increased flows over the Dam from approximately 500 cfs to 1500 cfs.

23. On or about April 3, 2003, DES observed that the temporary timber apron had failed and the apron had moved further downstream. DES personnel inspected the site on April 3, 2003 and met with the Owner. At that meeting, DES personnel discussed with the Owner other options for further temporary repairs. In addition to discussing temporary repair alternatives, DES personnel expressed concerns for the long-term safety of the dam and strongly suggested that the impoundment be lowered or drained until a complete structural evaluation and subsequent repairs could be carried out.

24. On April 4, and 5, 2003, the Owner disassembled the failed timber apron and used the timbers to construct a temporary repair to the Dam. The work consisted of placing the timbers at an angle against the downstream timber face of the Dam and wedging them against a portion of the remaining concrete apron.

25. On April 5, 2003, DES personnel visited the site to observe the temporary repair of the apron.

26. On April 21, 2003, DES issued a letter to the Owner indicating that DES was satisfied with the temporary repair and the timely response by the Owner to address the short term safety concerns with the Dam. In that letter DES re-iterated concerns regarding the long-term safety of the Dam and requested the Owner contact DES to discuss these concerns.

27. The Owner did not contact DES as requested to schedule a meeting

28. On May 7, 2003, DES personnel contacted the Owner to schedule a meeting. The Owner indicated he would check his schedule and call DES by the end of the day May 9, 2003.

29. The Owner did not contact DES to schedule a meeting

30. On or about May 13, 2003, DES personnel left a voice mail for the Owner requesting he contact DES to schedule a meeting.

31 The Owner did not contact DES to schedule a meeting

D. DETERMINATION OF VIOLATIONS

1. The Owner has violated RSA 482:11-a by failing to maintain the Dam to prevent it from becoming a "dam in disrepair". Specifically, safety concerns outlined by DES personnel in Item C.18 above have not been addressed.

E. ORDER

Based on the above findings, DES hereby orders the Owner as follows:

1. Continue to operate the Dam in a dewatered condition by keeping all stoplogs removed from the auxiliary spillway and main dam in order to divert all river flow through the auxiliary spillway. The Dam must be operated in this manner until such time as compliance with Items E.2 through E.5 are achieved to reconstruct the Dam, **OR** Items E.6 through E.8 are achieved to remove the Dam.

If the Owner elects to repair the Dam pursuant to Item E.1, then the Owner must address Item E.2 through E.5, below:

2. **By June 1, 2004** Retain the services of a Professional Engineer licensed in the State of New Hampshire who shall submit a schedule to DES for the investigation and analysis of the Dam to address items E.3 through E.5 below.

3. **By December 31, 2004** submit to DES an engineering report as completed by a New Hampshire Licensed Professional Engineer with results and recommendations resulting from structural, hydrologic, and hydraulic analyses of the Dam. The report should include conceptual reconstruction options for the Dam.

4. **By June 30, 2005** Submit design plans, specifications, and any required DES permit applications for the reconstruction of the Dam.

5. **By November 1, 2006** Complete the reconstruction of the Dam in accordance with the approved plans, specifications, and permit conditions.

If the Owner elects to remove the Dam pursuant to Item E.1, then the Owner must address Item E.6 and E.7, below:

6. **By August 31, 2004** Submit any required DES permit applications for the removal of the Dam

7. **By September 30, 2005** Remove the Dam in accordance with the approved plans specifications, and permit conditions.

8. Send correspondence, data, reports, and other submissions made in connection with this Administrative Order, **other than appeals**, to DES as follows:

Jeffrey M. Blaney, P.E., Dam Safety Engineer
DES Water Division
P.O. Box 95
6 Hazen Drive
Concord, NH 03302-0095
Fax: (603) 271-3406
e-mail: jblaney@des.state.nh.us

APPEAL

Any person aggrieved by this Order may appeal the Order to the Water Council by filing an appeal that meets the requirements specified in Env-WC 200 within 30 days of the date of this Order. Copies of the rule are available from the DES Public Information Center at (603) 271-2975 or at <http://www.des.state.nh.us/desadmin.htm>. Appealing the Order does not automatically relieve the Owner of the obligation to comply with the Order.

G. OTHER PROVISIONS

Please note that RSA 482:89 provides for administrative fines, civil penalties, and criminal penalties for the violations noted in this Order, as well as for failing to comply with the Order itself. DES will continue to monitor the Owner's compliance with applicable requirements and will take appropriate action if additional violations are discovered.

This Order is being recorded in the Belknap County Registry of Deeds so as to run with the land.


Harry T. Stewart, P.E., Director
Water Division


Michael P. Nolin, Commissioner

Certified Mail/RRR: *[insert number]*

Gretchen Rule, DES Legal Unit ✓
Public Information Officer, DES PIP Office
Jennifer J. Patterson, Sr. Assistant Attorney General, NH AGO EPB
Town of Bristol
Grafton County Registry of Deeds